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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

MAY 3 0 1989

MEMORANDUM

SUBJECT: Review of comments on waiver request from Baker Performance Chemicals Inc. on a Data Call-In for end-use products containing acrolein (Magnacide^R S, Magnacide^R, and Magnacide^R H).

FROM:

James W. Akerman, Branch Chief, Ecological Effects Branch, EFED

TO:/

Geraldine Werdig, (PM-50) Herbicides Branch, RD

We are in receipt of a request from your office to evaluate the waiver requests from the registrant Baker Performance Chemicals Inc. for products containing acrolein. In the response from the registrant to the DCI, they indicated that the required data should be waived due to the use patterns, a "semi-closed system" for Magnacide S, a "closed system" for Magnacide B, and an irrigation canal for Magnacide H. There were three registered uses in this registration action: 1. To treat microorganism induced slime problems in pulp and paper mill systems. 2. To control bacteria in oilfield equipment. 3. to control submerged and floating weeds and algae in irrigation canals. Each waiver request will be addressed in the following discussion.

1. Pulp and paper mill systems.

The registrant has requested a waiver for the use of an acrolein based product to control slime in pulp mill systems. The product will be introduced into the system as the wood is processed to make the pulp. Upon exiting the mill the contaminated water is to held in ponds on site but external to the mill. R. Lee of EEB did a review (Acc. #196656 June 10, 1987) of a monitoring study of the dissipation rate of acrolein in treated irrigation water and determined that initial concentrations of acrolein ranged from 0.77 to 1.5 ppm and was completely dissipated from the four canals in approximately 35 hrs on the average. Based on this information EEB can allow the waiver for aquatic plant testing provided that the treated water is retained in the holding ponds for at least 48 hrs. Honey bee acute toxicity testing can also be waived as the likelihood for exposure is minimal.

2. Oilfield equipment.

The use of acrolein based products in this type of a system would not pose a threat to vegetation as the product is injected into the drilling equipment. The registrant indicated that the product will be injected back into well and will remain underground to occupy the space evacuated by the oil. The label does not contain language to address the disposition of the product after it is separated from the usable oil products. Language should be developed to define the reinjection process as the endpoint for this use. If the label is changed to stipulate that the injection back into the reservoir is the ultimate endpoint then EEB does not feel that this poses a problem to plants. This waiver can be allowed. The honey bee acute contact toxicity need not be done as the likelihood of exposure is minimal.

3. Irrigation canal systems.

The registrant has requested a waiver for honey beee acute toxicity for this use only. The likelihood for exposure to bees is minimal for this use and the waiver can be allowed.